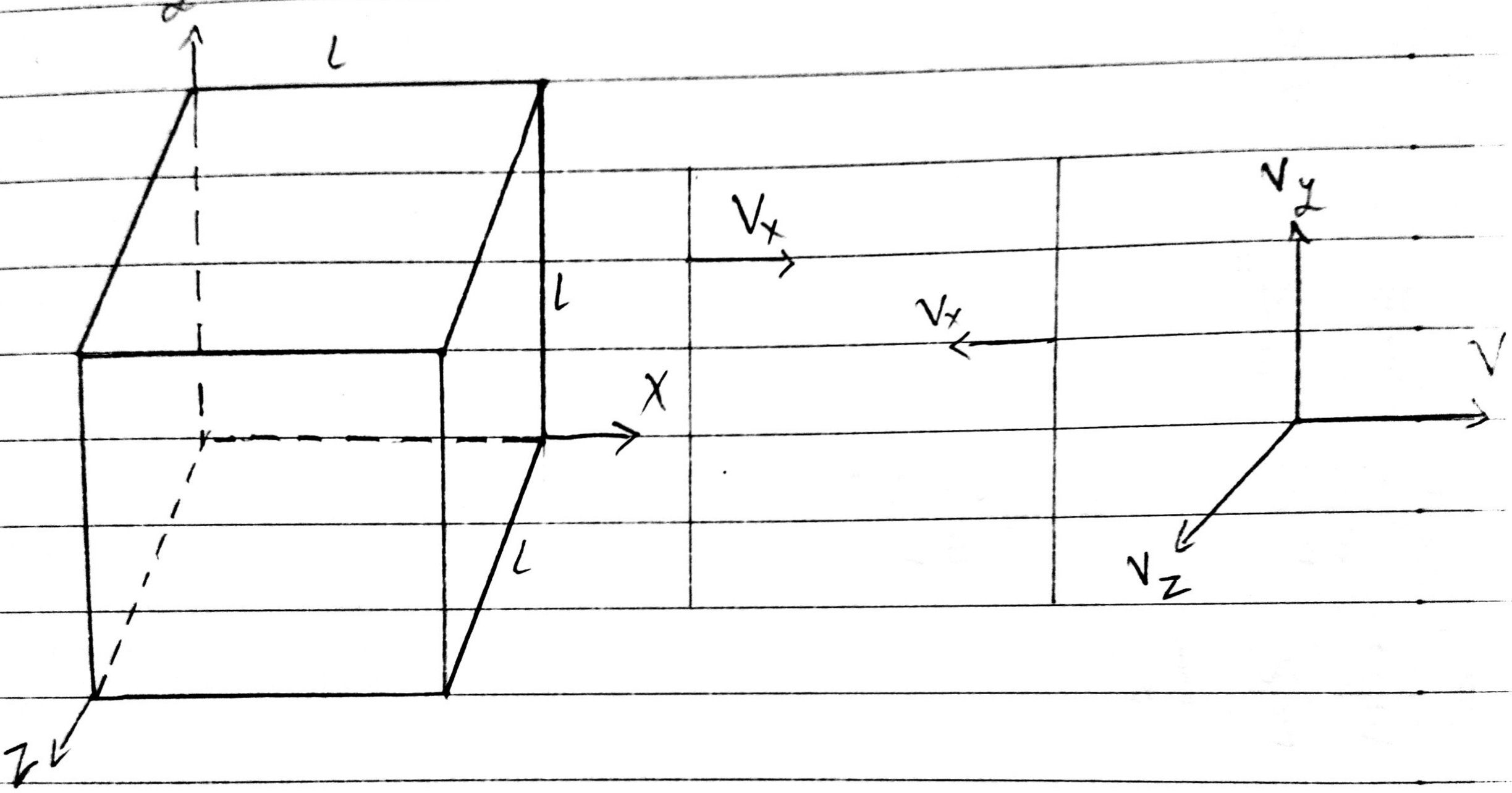
نظرية الموكة لحزيئات

الغاز

ضغط درجة حرارة الغاز



$$\bar{F} \cdot \Delta t = m V_x$$

$$\bar{F}_x \cdot \Delta t = m v_x - (-m v_x)$$

$$F_x \cdot \Delta t = 2 m V_x$$

$$\Delta t = \frac{L}{V_x}$$

$$P_x \cdot \frac{2L}{V_x} = 2 m V_x$$

$$\bar{F}_x = \frac{m V_x^2}{L}$$

DATE / / OBJECT

V_x , V_y , V_z

$$\bar{V}^2 = V_x^2 + V_y^2 + V_z^2$$

$$= 3 V_x^2$$

$$\overline{V_x^2} = \frac{\overline{V^2}}{3}$$

$$\bar{F} = \frac{m}{L} \frac{V^2}{3}$$

$$F_N = \frac{mV^2}{3L}(N) = \frac{N m V^2}{3L}$$

$$F = \frac{2}{3} \frac{N}{L} (E_K)$$

$$P = \frac{2}{3} \frac{N}{AL} (E_K)$$

$$P = \frac{2}{3} \frac{N}{V} (E_K)$$